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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/940,481	08/29/2001	Ricardo Cozar	212868US0X CONT	5253

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EXAMINER
IP, SIKYIN

ART UNIT	PAPER NUMBER
1742	10

DATE MAILED: 04/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

MF-10

Office Action Summary	Application No.	Applicant(s)	
	Examiner	Group Art Unit	

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication .
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

☑ Responsive to communication(s) filed on 1/28/02.

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

☑ Claim(s) 1-8 is/are pending in the application.

Of the above claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☑ Claim(s) 1-8 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 11 9(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).

*Certified copies not received: _____.

Attachment(s)

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Reference(s) Cited, PTO-892

☐ Notice of Informal Patent Application, PTO-152

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Other _____

Office Action Summary

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claims 1 and 7-8 are indefinite because from the temperature range of 80 to 100°C there are two mean coefficients of thermal expansion. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired.

Claim Rejections - 35 USC § 103

4. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-8 are rejected under 35 U.S.C. § 103 as being unpatentable over USP 5234512 to Inoue et al in view of USP 5236522 to Fukuda et al, USP 4932908 to Ishikawa et al, or USP 5164021 to Kato et al (All references are cited in the parent application).

7. The Inoue et al reference(s) disclose(s) the features including the claimed Fe-Ni shadow mask (abstract) and the conventional shadow mask processing steps such as etching and working (col. 1, lines 47-57). The difference between the Inoue et al reference(s) and the claims are as follows: The Fe-Ni alloy of Inoue et al does not contain Co element and Inoue et al do not disclose the claimed equation expressing the chemical composition of the alloy. However, it is well settled that there is no invention in the discovery of a general formula if it covers a composition described in the prior art, In re Cooper and Foley 1943 C.D. 357, 553 O.G. 177; 57 USPQ 117, Taklatwalla v. Marburg, 620 O.G. 685, 1949 C.D. 77, and In re Pilling, 403

O.G. 513, 44 F(2) 878, 1931 C.D. 75. In the absence of evidence to the contrary, the selection of the proportions of elements would appear to require no more than routine investigation by those ordinary skilled in the art. In re Austin, et al., 149 USPQ 685, 688.

8. With respect to the Co content, Fukuda et al (col. 2, lines 51-57), Kato et al (col. 2, lines 46-50), and Ishikawa et al (col. 3, lines 24-30) teaches the benefit of adding Co to Fe-Ni shadow mask materials in the same field of endeavor or the analogous metallurgical art. Therefore, it would have been obvious to one having ordinary skill in the art of the cited references at the time the invention was made to provide Fe-Ni alloy as Inoue et al with Co element as taught by Fukuda et al (col. 2, lines 51-57), Kato et al (col. 2, lines 46-50), and Ishikawa et al (col. 3, lines 24-30) in order to improve the etching adaptability of the Fe-Ni shadow mask material. It has been held that combining known ingredient having known functions to provide a composition having the additive effect of each of the known functions is within realm of performance of skilled artisan and is not a patentable subject matter. In re Castner, 186 USPQ 213, 217.

9. With respect to the etching step in the Inoue et al reference which is known in the art meant for drilling. See MPEP § 706.02(a); In re Malcolm, 1942 C.D. 589; 543 O.G. 440.

10. With respect to the claimed martensitic transformation starting point and the thermal expansion coefficient as recited in claims 1 and 7-8 that although the cited references do not disclose the claimed material properties; however, those properties as claimed would have been inherently possessed by the alloys of cited references because the claimed alloy composition is overlapped by the cited references as combined. The mere failure of the cited references to disclose all the advantages asserted by applicants is not substitute for actual differences in properties; see In re DeBlauwe, 222 USPQ 191, In re Best, 195 USPQ 430, and In re Swinehart, 169 USP 226. An apparently old composition cannot be converted into an unobvious one simply by the discovery of a characteristic that one cannot glean from the cited references; see Titanium Metals Corp. Vs. Banner, 227 USPQ 773, In re King et al, 43 USPQ 400, and In re James, 29 USPQ 431. It is well settled that when a claimed product appears to be substantially the same as a prior art product, the burden is on the applicant to prove that the product of the prior art does not necessarily or inherently possess characteristics attributed to the claimed product. In re Spade, 911 F.2d 705, 708, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990); In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977); and In re Fessmann, 180 USPQ 324.

Response to Arguments

11. Applicant's arguments filed January 22, 2002 have been fully considered but they are not persuasive.

12. Applicants argue that the cited references do not solve the same problem such as local doming in shadow masks. Applicants have a different reason for or advantage resulting from doing what the prior art relied upon has suggested does not demonstrative of nonobviousness, *In Re Kronig* 190 USPQ 425, 428 (CCPA 1976) ; *In Re Lintner* 173 USPQ 560 (CCPA 1972) ; the prior art motivation or advantage may be different than that of applicant while still supporting a conclusion of obviousness. *In re Wiseman* 201 USPQ 658 (CCPA 1979) ; *Ex parte Obiaya* 227 USPQ 58 (Bd. of App. 1985). Furthermore, dooming is known in the art of cited references (see USP 5236522 to Fukuda, col. 1, lines 18-29).

13. Applicants' arguments as set forth in page 7 of the instant remarks are noted. But, the claimed martensitic transformation start point would have been inherently possessed by examples 4-7 of Fukuda because said examples contain C in the claimed amounts (see also page 5, lines 10-14 of the instant specification).

14. With respect to the claimed thermal expansion coefficient that Fukuda discloses coefficients in Table 2, examples 4-11 which overlap the claimed thermal expansion coefficient.

Examiner Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Ip whose telephone number is (703) 308-2542. The examiner can normally be reached on Monday to Friday from 5:30 A.M. to 2:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Roy V. King, can be reached on (703)-308-1146.

The facsimile phone numbers are (703) 872-9310 (non-final Official Paper only), (703) 872-9311 (after-final Official Paper only), and (703) 305-7719 (Unofficial Paper only). When filing a FAX in Technology Center 1700, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are not for entry into the file of the application. This will expedite processing of your papers.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0651.

SIKYIN IP
PRIMARY EXAMINER
ART UNIT 1742

S. Ip
April 5, 2002